quently affected with syphilis, the indirect etiological importance of which Edinger does not underrate.

The frequency of certain accompanying symptoms, as pupillary disturbances, atrophy of the tongue, of the peroneal muscles, muscles of larynx, etc., is also explained by the unusual amount of function performed by these parts. It is not strange, either, that ophthalmoplegia progressiva is frequently combined with degenerations in the posterior columns.

Edinger considers that the progressive character of progressive general paralysis is also satisfactorily explained by his theory. He is convinced that the nerve tissue is always first affected in this disease. The more nervous substance that is destroyed the more do the remaining healthy parts of it become exerted, which again causes further decay of nervous tissue, etc.

The numerous forcible arguments put forth in defence of Edinger's theory speak highly for its validity. Its application to the comprehension of tabes in its manifold varieties and of the progressive character of general progressive paralysis, seems particularly convincing. ONUF.

CLINICAL.

The Differential Diagnosis of Encephalasthenia.—By Dr. Julius Althaus (*Deutsche Zeitschrift für Nervenheilkunde*, Vol. v., part 6).

The diagnosis of encephalasthenia, often a very easy one, leads some times to fatal mistakes. It is especially liable to be confounded with one of the following: Cerebral tumors and general paresis in early stages of somewhat latent or irregular course; thrombotic softening of the brain, hysteria, hypochrondriasis, and uric acid diathesis (lithæmia).

The absence of constant objective symptoms in encephalasthenia is principally responsible for the difficulty of diagnosis we are often confronted with in dealing with cases of this kind. According to the theory of the author that there are anatomically separated centres in the medulla for different vegetative functions, as, for instance, centre for the heart action, for the action of the glands, for the action of the kidneys, etc., isolated or combined functional disturbances are liable to occur in each of them, and produce clinical symptoms. Some of the latter show so much frequency and constancy as to justify their diagnostic importance, and prove of great value in comparison with the general limitation of objective symptoms in encephalasthenia.

Low specific gravity of the urine (1004-1002), neutral or alkaline reaction, and excess of phosphates are often met met with in encephalasthenics. Polyuria, slight degree of glycosuria (over 0.50-100) and constant or intermittent albuminuria are not very rare phenomena. Oxaluria is very rare, and by no means the cause of the encephalasthenic symptoms, as Prout believes. The careful examination of the urine in every "nervous" patient will help to avoid mistakes of diagnosis. Antipyrin has proved to be of nearly specific therapeutic power in the treatment of nervous (encephalasthenic) glycosuria.

Exaggeration of the tendon reflexes, especially the patellar reflexes, without muscular rigididity, though not constant, is a common occurrence in encephalasthenics.

Lastly, the absence of symptoms known to be produced by an anatomical lesion of the central or peripheral nervous system is in most of the cases conclusive.

The subjective symptoms of encephalasthenia are familiar; from the standpoint of a differential diagnosis the various morbid fears and paræsthesias of the head will sometimes be of great help.

Cerebral hæmorrhage and embolic softening of the brain seldom need be taken into consideration in the diagnostic raisonnement.

Thrombotic softening of the Rolandic cortex, leading to general and local symptoms, gives rise sometimes to doubt. The age of the patient, encephalasthenia occurring in younger, softening in senile persons, will be of some aid. The occasional appearance of attacks of aphasia, monoplegia, etc., will decide the diagnosis. Subcortical softening has too characteristic clinical features to need further discussion.

Cases of cerebral tumors showing any of the known characteristic symptoms are easily understood in their clinical appearance. Some cases of latent or irregular course are doubtful for a while. The close study of the character of the head symptoms will often prove to be useful. The headache in tumor cases is constant, real pain, uninfluenced by drugs, and in contrast to the inconstant, proteus-like paræsthesias of encephalasthenics.

General paresis in the final stage and with more pronounced psychical symptoms requires often great diagnostic skill. Excepting the somatic symptoms in general paresis, much of the diagnostic aid is derived from the frame of mind of the patient. The euphoria of the paralytic contrasts distinctly with the depression of the encephalasthenic. Too much importance should not be attributed to a slight difference of the pupils or slight sluggishness in their reactions, since Magnus has shown that aniscoria is not so uncommon a phenomena in persons without any serious lesion of the nervous system. Moreover, the author believes that a functional lesion in the ciliospinal centre can give rise to various pupillary symptoms, as hippus, inconstancy, sluggishness, or inequality. Disturbances of speech and writing occur in paretics as well as in encephalasthenics. In the latter, though, the symptoms are not due to any lesion of the speech centre, but simply the cause of the impaired memory and temporary absence of mind. Polyphasia, polygraphia (l'homme aux petits papiers—Charcot), and the use of the exalted language are known to be encephalasthenic symptoms. Cases of so-called pseudo-paresis are, as to the diagnosis, often left in suspense. Hysteria, being a psychosis, is quite distinctly differentiated from the neurosis in question.

Hysteria affects more the lower pyschical functions : feeling, disposition and instincts ; encephalasthenia the higher ones : perception, ratiocination and volition. Distinct motor and sensory symptoms speak in favor of hysteria.

If nosophobia be regarded as not belonging to hypochondriasis, the diagnosis of the latter will rarely meet with great difficulty, showing more constancy and regularity in its symptoms. Nosophobia being always caused by external influences, epidemics, etc., and being so easily dispelled by the assertions of the physician, is in marked contrast to the imaginations and organ-hallucinations of the hypochondriacs. These are permanent, slightly, if any, influenced by the physician, and originating in the patient himself, without any detectable external cause.

Lithæmia shows often just the opposite symptoms of encephalasthenia : pulse of high tension and high specific gravity of the urine.

FRAENKEL.

A Case of Syringomyelia Associated With Hysteria.—*Revista Sperimentale di Freuatria e di Medicina Negale*, Vol. xx., Fas. i., 1894. Dr. Cesare Agostini, of Peruvia, describes a case of syringomyelia in a hysterical woman, thirty-five years old. Her family history reveals alcoholism, phthisis and nervous derangements. Her present illness began four years ago, with neuralgic pains in the left scapular region, and with formication and a feeling of weight and debility in the arms, first affecting the pectoral region, then the arms, forearms, and lastly the hands. At the same time she developed hysteria, paraplegia and aphasia, and later on the classical convulsions of hysteria major. These symptoms persisted for two years and were finally treated successfully by hypnotism.

Muscular force of right hand thirty, of left five. Marked atrophy of the muscles of the forearm, of the interossei, and of the thenar and hypothenar eminences.

Sensibility—tactile sensibility is generally preserved, save on the posterior part of the left upper arm where hyperthesia is present. Sensation of heat and cold and of pain are abolished from the neck to the ninth intercostal space and in the left arm. Muscular sense is intact, likewise sense of taste, sight and hearing. Visual fields concentrically contracted. Pupils do not react. Exaggeration of the muscle and tendon reflexes. Reaction of degeneration in the muscles of the thenar and hypothenar eminences.

After reviewing the literature on syringomyelia, the author concludes his article as follows:

1. Syringomyelia may be associated with hysteria, and confusion may arise when the difference pertains to sensibility alone.
2. The presence of progressive muscular atrophy, accompanied by diminished electrical excitability, persistence of the muscular sense, point to a syringomyelic affection rather than an hysterical.
3. The best diagnostic criterion in this and other neuropathic affections is hypnosis, in which muscles with anatomical lesions do not pass in to the cataleptic state.

KRAUSS.

Caries of the Spine Causing Compression of the Cord Relieved by Laminectomy.—Noble Smith (*Brit. Med. Jour.*, Dec. 1, 1894). The patient, a woman thirty-one years old, developed, after injury to the spine by lifting, a progressing weakness of the lower extremities which was associated with pain and anæsthesia. The pain was in the region of the sacrum, neuralgic in character, and periodically very severe. It was greatly increased by attempts at walking. Anæsthesia was complete as high as the gluteal fold posteriorly, and in front extended on the right side as high as Poupart's ligament, on the left nearly to the breast. The buttocks were hypersensitive; on the inner surface of the thighs, as far down as the knees, there was a narrow area of hyperæsthesia. Laminectomy, by removal of the neural arches of the eighth and ninth dorsal vertebræ, exposed a spongy material beneath the arch of the eighth vertebra, which was producing some pressure on the cord. The removal of this was followed by gradual recovery, so that five months after the operation she is able to walk without aid of stick or crutch. The spasmodic jerking of the lower extremities has ceased. Reflex aches have disappeared, as has also a sense of coldness of the lower extremities, which before the operation had been annoying. [The disappearance or the persistency of the hypæsthesia and hyperæsthesia after the operation are not referred to by the author].

COLLINS.

A Case of Friedreich's Disease With Necropsy.—J. M. Clarke (*Brit. Med. Jour.*, Dec. 8, 1894) reports a case of Friedreich's disease, which was complicated by the growth of a cerebellar tumor. The tumor was of very rapid growth and gave rise to such marked symptoms that these were recognized as a fresh addition to those of Friedreich's disease. The patient, sixteen years old at the time of death, had been affected since he was four years old. Neurotic family history, but no direct inheritance of the disease. An elder brother is affected in the same way. The symptoms which the patient exhibited were those typical of the disease. The unusual feature was the preservation of knee-jerk, but no ankle clonus; no increase of the deep reflexes or spastic rigidity. The symptoms pointing to brain tumor did not come on until less than a month before his death. They were vomiting, headache, inability to stand or walk, some convulsive seizures, lethargy, intense optic neuritis in both eyes, disappearance of knee-jerks, coma, opisthotonic spasm preceding death. The autopsy revealed a round lobulated tumor springing from the outer surface of the right half of the cerebellum, laying by the side of the pons and upper part of the medulla. Pathological examination of the central nervous system showed that the morbid changes affected chiefly the posterior columns, next the lateral, with involvement especially of the margin of the cord, with thickening in the pia mater and in the walls of the vessels and, probably, with some general excess of neuroglia, and small size generally of the cord. The changes were diffuse and nowhere had produced complete degeneration, and varied much at different levels. The cord was involved throughout its entire extent. The direct cerebellar tract was healthy. COLLINS.

The Diagnosis of Extra-Medullary Spinal Cord Tumor. —Pfeiffer (*Deutsche Zeitschr. f. Nervenheilk.* Vol. v., 1894, p. 63). Male, 48, strong suspicion of syphilis in 1863. Probable secondary manifestations till 1871, but no apparent results of syphilis on examination. During past five years severe pain in the course of left sixth rib. No benefit from inunctions. Sensitive over sixth and seventh dorsal vertebræ. Exaggerated reflexes of lower extremities, especially marked on right side. Drags the left foot when he walks. Sphincters normal. Pain along sixth rib very severe and not controlled by narcotics. Girdle sensation, particularly on the sides. Lancinating pains radiating through legs. Motility and sensibility of trunk and upper extremities intact. No ataxia or Romberg's symptom. Diagnosis—Tumor of spinal cord (?) based principally on the severe, definitely localized, unattributable, uncontrolable pain. To relieve the pain, an operation consisting of section of the fifth, sixth and seventh extra-medullary dorsal roots, and extirpation of the thickened ganglion of the sixth nerve, was done. This was followed by important diminution of the pain ; gradual appearance of interrupted conduction through the dorsal portion of the cord, till total paralysis of lower extremities resulted; anæsthesia from the umbilicus down, and paralysis of bladder and rectum. Cystitis and bed sores preceded death, which occurred two months after the operation. Autopsy revealed softening of cord in dorsal region, cystitis, pyelitis, and tumor of spleen. Histological findings—Myelitis of dorsal portion of cord, with ascending and descending degeneration and slight inflammatory thickening of both sixth dorsal spinal ganglia. COLLINS.

THERAPEUTICAL.

Duboisine in Morphinism.—Bernabee reports, in the *Bulletin della Societa Lancisiana degli Ospedali di Roma, 1893*, a case of morphinism in a man affected with a neurosis of some months' standing, who injected subcutaneously 20 to 30 centigrammes of morphia daily. He presented all the phenomena of chronic morphine poisoning. All remedies, including hypnotism, were tried, but to no effect. Duboisine injected daily one-quarter to one-half millogramme, succeeded in a short time in curing the craving for morphine. KRAUSS.

Subcutaneous Injections of Sulphate of Duboisine in Mental Medicine.—By J. Massant (*Bul. de la Soc. de Med. Mental de Belgique*, December, 1893). In mental excitability of the insane the author considers the sulphate of duboisine in doses of from 1-100 to 1-75 gr., used hypodermically twice daily, a valuable medicament. The patient does not become accustomed to its use, and in addition to the mental quietude that it causes it induces sound and refreshing sleep. It occasionally, when given in larger doses, produces disagreeable but not dangerous symptoms, such as vertigo, nausea, vomiting, syncope, tachycardia, and, rarely, loss of consciousness, with or without twitchings of the muscles and incontinence of sphincters. When given in moderate doses, and its effects carefully watched, none of these symptoms result. COLLINS.

The Treatment of Myxœdema.—Dr. John Julius Schmidt (*Deutsche Med. Wochenschr.*, Oct. 18, 1894) concludes that no permanent cure can be effected by the thyroid treatment. The administration of